

Mo:5.0% to 30%
 Cr:0 to 8%
 Y:0% to 1.5%
 B:0% to 2.5%
 Me:0% to 10% where Me is at least one metal other than Ti, and taken from groups 3 to 8 of the periodic classification of the elements
 Si: balance needed in order to reach 100% depositing the mixture on the surface of the material to be protected; and
 performing at least one heat treatment under an inert atmosphere at a temperature that is not less than the melting point of the eutectic forming the healing phase; and
 further characterized in that:
 Me is selected from Mn, Fe, Co, and Ni;
 the heat treatment further includes a step performed in an oxidizing medium to form an oxide film on the surface of the coating and depositing at least one of a layer of refractory oxide on the surface of the coated material; and a layer of non-oxide ceramic on the surface of the coated material.

5. A method according to claim 4, characterized in that the composition of the mixture of powders, in percentage by weight is:
 Ti: about 30%.
 Mo: about 10%
 Cr: about 0.2%
 Y: about 0.5%
 B: about 2%
 Me: about 7%
 Si: balance needed in order to reach 100%.

6. A method according to claim 5, characterized in that:
 Me is iron; and further characterized by at least one of:
 the mixture of powders being put into suspension in a liquid for the purpose of being deposited on the surface of the refractory material; and
 the mixture of powders being deposited on the surface of the material by a method selected from cold supersonic spraying, explosion spraying, and plasma spraying.

7. A product according to claim 1, characterized in that the coating further includes a surface oxide film comprising silica obtained by oxidizing silicon contained in the coating.

8. A product according to claim 1, characterized in that Me is a metal selected from Mn, Fe, Co, and Ni.

9. A product according to claim 1, characterized in that the coating further comprises boron and/or yttrium in combined form.

10. A product according to claim 9, characterized in that the coating includes yttrium disilicide YSi_2 .

11. A product according to claim 9, characterized in that the coating includes titanium boride and/or yttrium boride.

12. A product according to claim 10, characterized in that the coating includes titanium boride and/or yttrium boride.

13. A product according to claim 1, characterized in that the refractory material is selected from alloys of niobium, of tantalum, of molybdenum, of tungsten, intermetallic compounds and alloys containing dispersed oxide phases.

14. A product according to claim 1, characterized in that the refractory material is selected from aluminum, titanium, nickel, alloys thereof, and intermetallic compounds and alloys of the $TiAl$, Ti_3Al , $TiAl_3$, $NiAl$, Ni_3Al type, for which the coating performs an anti-ignition function.

15. A product according to claim 1, characterized in that the refractory material is a composite material containing carbon.

16. A product according to claim 1, characterized in that the refractory material is a composite material selected from carbon—carbon and carbon-SiC composite materials.

17. A method of obtaining a product of refractory material that is protected against oxidation, according to claim 1, the method comprising the steps consisting in:

preparing a mixture containing powders having the following composition in percentage by weight:

Ti:15% to 40%

Mo:5.0% to 30%

Cr:0 to 8%

Y:0% to 1.5%

B:0% to 2.5%

Me:0% to 10% where Me is at least one metal other than Ti, and taken from groups 3 to 8 of the periodic classification of the elements

Si: balance needed in order to reach 100%

depositing the mixture on the surface of the material to be protected; and

performing at least one heat treatment under an inert atmosphere at a temperature that is not less than the melting point of the eutectic forming the healing phase.

18. A method according to claim 17, characterized in that Me is selected from Mn, Fe, Co, and Ni.

19. A method according to claim 17, characterized in that the heat treatment further includes a step performed in an oxidizing medium to form an oxide film on the surface of the coating.

20. A method according to claim 19, characterized in that it further includes depositing a layer of refractory oxide on the surface of the coated material.

21. A method according to claim 19, characterized in that it further includes depositing a layer of non-oxide ceramic on the surface of the coated material.

22. A method according to claim 12, characterized in that the composition of the mixture of powders, in percentage by weight is:

Ti: about 30%

Mo: about 10%

Cr: about 0.2%

Y: about 0.5%

B: about 2%

Me: about 7%

Si: balance needed in order to reach 100%.

23. A method according to claim 22, characterized in that Me is iron.

24. A method according to claim 17, characterized in that the mixture of powders is put into suspension in a liquid for the purpose of being deposited on the surface of the refractory material.

25. A method according to claim 24, for obtaining a product of porous refractory material protected against oxidation, characterized in that the mixture of powders is also inserted into the accessible pores of the material.

26. A method according to claim 17, characterized in that the mixture of powders is deposited on the surface of the material by a method selected from cold supersonic spraying, explosion spraying, and plasma spraying.

27. A method according to claim 17, for obtaining a product of porous refractory material protected against oxidation, characterized in that the mixture of powders is also inserted into the accessible pores of the material.